

It is especially interesting to record this naturalization in view of the success that *C. falcatum* has had in the Charleston area following its naturalization in the early 1940's; see K. W. Hunt's "Ferns of the vicinity of Charleston, S.C." (Charleston Museum Leaflet No. 17). Voucher specimens of *C. fortunei* have been deposited in several herbaria, including those of the New York Botanical Garden, The Smithsonian Institution, and The Charleston Museum. I wish to thank Dr. David B. Lellinger and Albert Girdali of The U.S. National Herbarium for identifying this fern.—*John M. MacDougal, 1 New Town Lane, Charleston, SC 29407.*

FORKED FRONDS IN ASPLENIUM RHIZOPHYLLUM.—Forking of fern fronds is a common occurrence, but has not been reported for *Asplenium rhizophyllum* L. Buzz Darby, an amateur naturalist of Springfield, Missouri, has discovered several colonies of *A. rhizophyllum* in Newton County, Arkansas, in which some plants had a forked blade. The identity of two such colonies growing

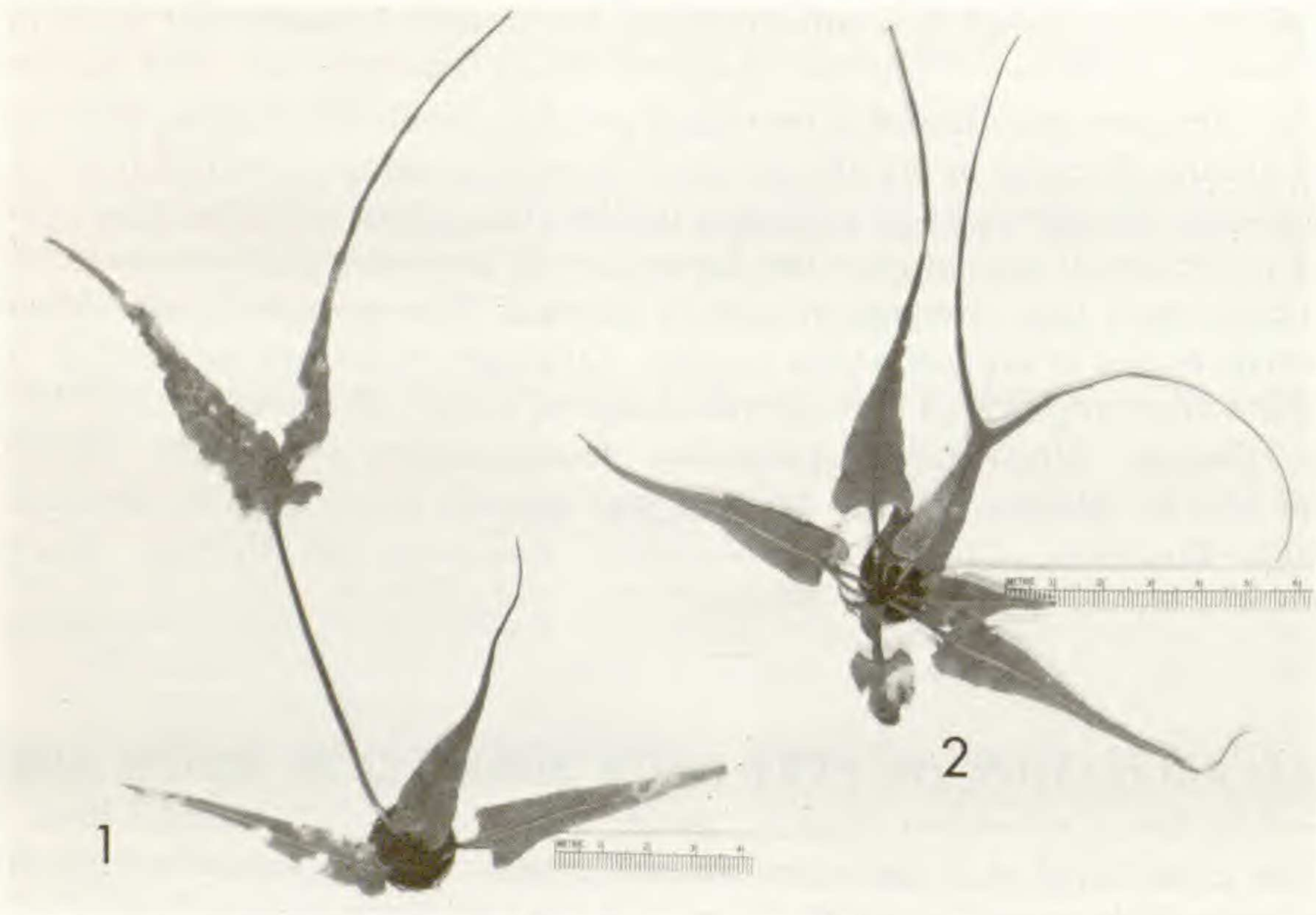


FIG. 1. *Asplenium rhizophyllum* with blade forked at base (Key 1238, SMS). FIG. 2. *A. rhizophyllum* with blade forked (Key 1239, SMS).

along a creek bank on moss-covered sandstone boulders has been confirmed and vouchers made (Key 1238, 1239, SMS). Colonies with similarly forked blades have been found on limestone outcroppings in a mesophytic forest in Montauk State Park, Dent County, Missouri (Maupin 1145, SMS) and in a similar habitat near Eminence in Shannon County, Missouri, (Key 1282, SMS). My son has discovered a fourth location on limestone near the opening of the Ozark Underground Laboratory Cave in the xerophytic, forested hills of Taney County, Missouri.

In some plants, the stipe of the forked frond is unusually long (8 cm) and is triangular (1.5-2 mm on each side). Forking occurs 5 mm above the cordate base of the doubled, sorus-bearing blade (*Fig. 1*). The Dent County fronds are similar to this, although several immature plants have small blades with shallowly or deeply notched, rounded tips, rather than attenuate tips. Another frond is forked 3 cm above the base of the blade, and is immature, lacking sori (*Fig. 2*).

Because only a single forked frond is present on most plants, it is unlikely that forking is genetically controlled. Trauma to the tips of young fronds, probably by insects, seems to be the most likely cause, but against this is the Maupin specimen in which the forking occurs at the upper end of the stipe, rather than in the blade itself. Studies are underway to determine the influence of blade-tip trauma on the development of immature fronds. The discovery of forked *A. rhizophyllum* fronds in distinctly different habitats and localities makes it quite likely that forking is of more than occasional occurrence. I suspect that close observation would reveal more plants with forked fronds, which are almost impossible to see at a glance and often require several minutes of search, even when one knows the exact area to be searched.—*James S. Key, Department of Life Sciences, Southwest Missouri State University, Springfield, MO 65802.*

A NOTE ON THE YOUNG FRONDS OF OPHIOGLOSSUM PALMATUM.—In his excellent account of the natural history of *Ophioglossum palmatum* L. in South Florida, Mesler (*Amer. Fern J.* **65**: 33-39, 1974) writes: "The leaves of *O. palmatum* have been described as palmately or dichotomously lobed, but no ontogenetic evidence has been presented to support either view". I presume he refers to the vernating leaves, as adult forms are obviously lobed and often dichotomous in segmentation. I have grown several plants of *O. palmatum* collected by Wagner and Gómez in 1971 north of San José near Vara Blanca, Province of Heredia, Costa Rica, and have been able to observe the emergence of several generations of fronds under greenhouse conditions. The leaves emerge and uncurl (they are not, like the rest of the Ophioglossaceae, circinnate, but erupt from the substratum almost always bent) and are dichotomously bilobed. Sometimes, they are spatulate, with a rather truncate apex. The laminae are pinkish green, soft but already fleshy, small and quite out of proportion to the petiole, which is many times longer and robust. My specimens, after removal from the original habitat, were planted in well-drained pots, placed under 50% sunlight and at about 75% relative humidity, with temperatures that averaged 18°C. The fronds were able to grow laxly erect. I agree with Mesler that the establishment of subspecies or varieties based on blade morphology and size is not only inconvenient, but, I think, quite improper. The variation in leaf size, shape, texture, and insertion of the sporophylls on the petioles and laminae, is tremendous.—*Luis Diego Gómez P., Herbario Nacional, Museo Nacional de Costa Rica, Apartado 749, San José, Costa Rica.*